

# Cooking off the Grid

Presentation by Lisa Bedford, Survival Conference, Dallas, May 29, 2011

- I. Overview of workshop
  1. Why is cooking off the grid important?
  2. Why is solar the #1 choice?
  3. What features should a solar oven have?
  4. Solar cooking tips
  
- II. Main reason for cooking off the grid:
  1. Survival
  2. Food
  3. Sanitation
  4. Clean water
  
- III. Solar is hard to beat as an alternative to electricity/gas
  1. Food & Water
    - a. Cooking
    - b. Heating water for pasteurization
    - c. Sanitation
      - i. Having clean water for laundry, bathing
      - ii. Sanitizing medical equipment/tools
  2. Fuel-free
    - a. Large amounts of fuel is difficult to store
    - b. Vulnerable to shortages, shipping issues

- c. Can be costly
- d. Dangerous fumes to deal with
- e. Possible to store a year's worth of food. Not possible to store a year's worth of fuel

3. Electricity-free

- a. Increasing costs
- b. Not always reliable
- c. Vulnerable to EMP
- d. Outages common

IV. How does a solar cooker work?

1. Shiny surface concentrates sunlight
2. Converts light to heat
3. Trapped heat cooks food
4. Very much like heat trapped inside a car/truck
5. What affects how food cooks?
  - a. Time of year and day
  - b. Amount of sun
  - c. Amount of wind
  - d. Thickness of pot
  - e. Amount and size of food
  - f. Amount of water

V. What features should a good solar oven have?

1. Regardless of whether you build your own or purchase one, there are a few features should need to know about.

2. Portability - Lightweight

- a. Sun Oven weighs just 21 pounds.
- b. Can easily be moved from place to place.
- c. Easy to transport in an evacuation.
- d. Can be placed anywhere to maximize sunlight.

3. Heavy-duty

- a. Can be much larger to hold more food.
- b. Install in a single, best spot.
- c. Built using sturdiest materials for longevity

4. Ease of use – increases likelihood of use

- a. Easy to set up
- b. Easy to repair
- c. Easy to clean
- d. Easy to transport

5. Quality materials

- a. Longer warranty if commercially made
- b. Increased reliability
- c. Long lasting appliance

VI. Two ways to cook with a solar cooker

1. Slow cooker method

- a. Set out oven in the morning.

- b. Place oven so it faces due south.
- c. Leave in place all day.

2. "Quick" Cooking

- a. Place in sun so the shadow is directly behind oven and even on both sides.
- b. Refocus every 30-40 minutes.
- c. Preheat for quicker cooking time.

VII. Getting started

- 1. Use the right type of pot: thin metal, dark, with lid
- 2. Keep track of what you cook
  - a. What you cook, time of day, length of time, results
- 3. Easy beginnings
  - a. rice
  - b. brownies
  - c. hard boiled eggs
  - d. soup
  - e. water
- 4. Experiment with new recipes and types of food
- 5. Foods cook fastest between 10 a.m. and 2 p.m.
- 6. Pre-heat oven for 20 minutes.
- 7. Be sure to use pot-holders

VIII. Consider adding a multi-fuel portable stove for days when the sun isn't shining.

